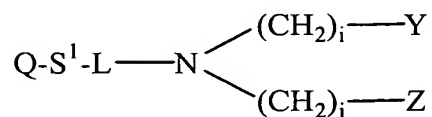


# ABSTRACT

A metal chelating composition having the formula:



wherein

- Q is a carrier;
- 5      $\text{S}^1$  is a spacer;
- L is -A-T-CH(X)- or -C(=O)-;
- A is an ether, thioether, selenoether, or amide linkage;
- T is a bond or substituted or unsubstituted alkyl or alkenyl;
- X is  $-(\text{CH}_2)_k\text{CH}_3$ ,  $-(\text{CH}_2)_k\text{COOH}$ ,  $-(\text{CH}_2)_k\text{SO}_3\text{H}$ ,  $-(\text{CH}_2)_k\text{PO}_3\text{H}_2$ ,  $-(\text{CH}_2)_k\text{N}(\text{J})_2$ ,
- 10 or  $-(\text{CH}_2)_k\text{P}(\text{J})_2$ , preferably  $-(\text{CH}_2)_k\text{COOH}$  or  $-(\text{CH}_2)_k\text{SO}_3\text{H}$ ;
- k is an integer from 0 to 2;
- J is hydrocarbyl or substituted hydrocarbyl;
- Y is -COOH, -H, -SO<sub>3</sub>H, -PO<sub>3</sub>H<sub>2</sub>, -N(J)<sub>2</sub>, or -P(J)<sub>2</sub>, preferably, -COOH;
- Z is -COOH, -H, -SO<sub>3</sub>H, -PO<sub>3</sub>H<sub>2</sub>, -N(J)<sub>2</sub>, or -P(J)<sub>2</sub>, preferably, -COOH; and
- 15     i is an integer from 0 to 4, preferably 1 or 2.